What is claimed is:

1. A method of detecting the presence of prion protein in a sample comprising contacting said sample with an agent which binds to the amino acid sequence Gln-Pro-His of prion protein and detecting said agent bound to said prion protein.

2. The method of Claim 1 wherein the prion protein is PrP^{C} protein, PrP^{SC} protein, or a variant thereof.

3. The method of Claim 1 wherein the agent is a protein, peptide, polypeptide, nucleic acid, non-peptide organic molecule or organic reagent.

4. The method of Claim 3 wherein the protein is streptavidin.

5. The method of Claim 4 wherein the streptavidin is bound to a detectable marker.

6. The method of Claim 5 wherein the detectable marker is selected from the group consisting of a fluorescence marker, an enzyme, or a radiolabeled marker.

7. The method of Claim 6 wherein the enzyme is phosphatase.

8. The method of Claim 1 wherein said sample is blood, plasma, serum, cerebrospinal fluid, brain tissue, cornea tissue, urine, fecal matter, soil, bone meal, beef, beef by-products, sheep, sheep by-products, deer, deer by-products, elk, elk by-products, water or milk.

9. The method of Claim 1 wherein the prion protein is detected by electrophoretic separation on a denaturing gel.

10. The method of Claim 9, wherein the denaturing gel is a urea polyacrylamide gel.

11. A method of isolating prion protein in a sample comprising contacting said sample with an agent which binds to the amino acid sequence Gln-Pro-His of prion protein under conditions permitting said agent to bind to prion protein and isolating prion protein bound to said agent.

12. The method of Claim 11 wherein the prion protein is PrP^{c} protein, PrP^{sc} protein, or a variant thereof.

13. The method of Claim 11 wherein the agent is a protein, peptide, polypeptide, nucleic acid, non-peptide organic molecule or an organic reagent.

14. The method of Claim 13 wherein the protein is streptavidin.

15. The method of Claim 14 wherein the streptavidin is bound to a detectable marker.

16. The method of Claim 15 wherein the detectable marker is selected from the group consisting of a fluorescence marker, an enzyme, or a radiolabeled marker.

17. The method of Claim 16 wherein the enzyme is phosphatase.

18. The method of Claim 11 wherein the agent which binds to the amino acid sequence Gln-Pro-His is bound to a solid support.

19. A prion protein detectable kit comprising an agent which binds to the amino acid sequence Gln-Pro-His of prion protein.

20. The kit of Claim 19 wherein the prion protein is PrP^{C} protein, PrP^{SC} protein, or a variant thereof.

Rule 1.126

21. The kit of Claim 19 wherein the agent is a protein, peptide, polypeptide, nucleic acid, non-peptide organic molecule or organic reagent.

22. The kit of Claim 19 wherein the agent is streptavidin.

23 ~~22~~. The kit of Claim 22 wherein the streptavidin is bound to a detectable marker.

24 ~~23~~. The kit of Claim 22 wherein the detectable marker is selected from the group consisting of a fluorescence marker, an enzyme, or a radiolabeled marker.

25 ~~24~~. The kit of Claim 23 wherein the enzyme is phosphatase.

26 ~~25~~. A method for diagnosing a disease condition caused by an infectious prion protein in a subject comprising the steps of:

(a) contacting a biological sample from the subject with an agent which binds to the amino acid sequence Gln-Pro-His of prion protein; and

(b) detecting formation of a complex between said prion protein and said agent, if present in said biological sample.

27 ~~26~~. The method of Claim 25 wherein the prion protein is PrP^{C} protein, PrP^{SC} protein, or a variant thereof.

28 ~~27~~. The method of Claim 25 wherein the agent is a protein, peptide, polypeptide, nucleic acid, non-peptide organic molecule or an organic reagent.

29 ~~28~~. The method of Claim 27 wherein the protein is streptavidin.

30 ~~29~~. The method of Claim 25 wherein said biological sample is blood, plasma, serum, cerebrospinal fluid, brain tissue, cornea tissue, urine or fecal matter.

31 ~~30~~. A method for treating or preventing a disease condition caused by an infectious prion protein in a subject comprising administering to said subject an amount of an agent which binds to the amino acid sequence Gln-Pro-His of prion protein effective to treat or prevent the prion disease.

32 ~~31~~. The method of Claim 30 wherein the agent is a protein, peptide, polypeptide, nucleic acid, non-peptide organic molecule or organic reagent.

33 ~~32~~. The method of Claim 30, wherein the prion disease is Creutzfeld-Jakob disease, variant Creutzfeld-Jakob disease, Gerstmann-Sträussler-Scheinker disease, fatal familial insomnia, scrapie, bovine

spongiform encephalopathy (mad cow disease), transmissible mink encephalopathy, feline spongiform encephalopathy, exotic ungulate encephalopathy, or chronic wasting disease.

34 ~~33~~. A method for inhibiting the dissemination of prion protein disease comprising inactivating streptavidin that may be contained in a physical substance by treating the physical substance with an amount of biotin, or a derivative thereof, effective to bind to the streptavidin, if present in the physical substance.

35 ~~34~~. The method of Claim 33, wherein the physical substance is a liquid or a solid substance.

36 ~~35~~. The method of Claim 33, wherein the liquid substance is water, milk or juice.

37 ~~36~~. The method of Claim 34, wherein the solid substance is meat, meat by-products, animal feed, or soil.

38 ~~37~~. A method for treating a prion disease in a subject comprising administering to the subject an amount of biotin, or a derivative thereof, effective to treat the prion disease in the subject.

39 ~~38~~. The method of Claim 37, wherein the prion disease is Creutzfeld-Jakob disease, variant Creutzfeld-Jakob disease, Gerstmann-Sträussler-Scheinker disease, fatal familial insomnia, scrapie, bovine spongiform encephalopathy (mad cow disease), transmissible mink encephalopathy, feline spongiform encephalopathy, exotic ungulate encephalopathy, or chronic wasting disease.

40 ~~39~~. The method of Claim 37 wherein the biotin is administered intravenously or by ingestion.

41 ~~40~~. The method of Claim 37, wherein the subject is a human or an animal.

42 ~~41~~. A method for screening for an agent which binds to the amino acid sequence Gln-Pro-His of the human prion protein comprising detecting the presence of the agent bound to the prion protein.

43 ~~42~~. A method for screening for an agent that binds to two or more prion proteins comprising the steps of (1) combining infectious and non-infectious prion protein to form a protein mixture; (2) adding to the protein mixture a sample containing a potential agent that binds to two or more prion proteins; and (3) comparing the resulting levels of infectious and non-infectious prion protein to the initial levels combined.